RADIO

MARCONI REALLY FATHER OF RADIO

Story of the Gifted Italian's Work In Development of Air Communication.

While experiments along the line of radio really started as far back as 1827 and hundreds of scientists were interested in solving the problems involved for many years, it was not until 1896 when Senatore Guglielmo Marconi took out his first patent that the mastery of air communication got its first great impetus. His life history is to all practical intents the history of radio communication.

Senatore Guglielmo Marconi, G. C. V. O., L. L. D., D-Sc. M. I. E. E., was born in Bologna, Italy, April 25, 1874. His mother was Irish, while his father was of a family whose mechanical ability was marked. After an education at Leghorn and Bologna, the young man interested himself in the problem of wireless telegraphy, starting his research in 1895. He went to England and in 1896 took out the first patent ever granted for a practical system of wireless telegraphy, by the use of electric waves. His early experiments in England were made at Westbourne Park. Shortly afterward Marconi saw W. H. Preece and at his request made some experiments for officials of the postoffice. Some further experiments were made in May, 1897, in the Bristol channel, wireless communication being established between Lavernock and Brean Down, a distance of nine miles.

On the invitation of the Italian government Marconi afterward went to Spezia where a land station was erected, which was kept in constant communication with two Italian battleships working from a distance of 12 miles. For this success the Italian government conferred upon Marconi the honor of knighthood. After a return to England further experiments were conducted and on July 20, 1897, the first radio company was formed and two permanent stations erected. In 1898 wireless reports of yacht races in Kingston were made and proved the usefulness and adaptability to which the system lends itself to commercial purposes. In December, 1898, Marconi installed apparatus to provide communication between the South Foreland lighthouse and a lighthouse on the south coast. In 1899 Marconi read a paper on "Wireless Telegraphy" before the Institution of Electrical Engineers in London.

Early in 1901 telegraphic communication was established between two points more than 250 miles distant and at the end of that year Marconi transmitted signals from Poldhu, in Cornwall to St. Johns, Newfoundland. In 1902 he received on board the steamship Philadelphia in the presence of the officers, good messages on the tape when at a distance of over 1,500 miles from the transmitting station and signals at over 2,000 miles. In December, 1902, the station established at Cape Breton, Nova Scotia, under a contract with the Canadian government for transatlantic wireless telegraphy, was put into communication with the Cornwall station at Poldhu and inaugural messages were transmitted to the King of England, the King of Italy and to the London Times. In October, 1903, the steamship Lucania published a daily wireless bulletin from messages received from the Marconi stations. A powerful station at Clifden on the west coast of Ireland was opened early in 1907 for the establishment of commercial relations with the American continent at Glace Bay.

Mr. Marconi's work has been recognized by many governments and seats of learning; he has been decorated by the King of Italy and the late ex-Czar of Russia as an honorary doctor of many universities, including Oxford, Glasgow, Aberdeen, Liverpool and Pennsylvania, besides having received the freedom of the principal Italian cities. In 1914 he was elected a senator in the Italian parliament. He also holds many scientific awards granted by various societies and institutions.

Upon the declaration of war by Italy, Senatore Marconi placed his services at the disposal of King Victor and was given the rank of lieutenant in the Italian army. He was employed on important military missions to England by the Italian government and after this service was transferred as temporary commander in the Italian navy. Marconi visited the United States in 1917 as member of the official mission sent by Italy. In 1919 Marconi was appointed plenipotentiary delegate to the peace conference at Paris, and in this capacity signed the peace treaties with Austria and Bulgaria. He was afterward awarded the Italian military cross.

This very important figure in the wireless world, who has received about all the honors possible for the scientific world to bestow upon him,

Guglielmo Marconi.

including the Nobel prize, has not given up active work, but is even now engaged in radio telephone experiments.

Radio enthusiasts have increased tenfold within the last few months, it appears from a survey conducted by the Associated Press and covering the central west, Kentucky and Texas. At virtually all points from which reports have been received, there are thousands of radio sets, particularly for purposes of telephony, where at most there were hundreds before.

While the sets are used chiefly for pleasure and experience, they are being put to practical uses in many cases. Numerous farmers are receiving market and weather reports, and police are receiving bulletins. Sermons, concerts, health talks and style talks are transmitted. Universities and professional operators are co-operating.

Approximate figures are reported from various states and centers indicating the present number of radio sets. According to A. L. Benson of St. Louis, division manager of the American Radio Relay league, about 90,000 radiophones are used in four states as follows: Iowa, 23,000; Missouri, 25,000; Nebraska, 22,000; Kansas, 20,000. In St. Louis alone there are some 2,200. The radiophones chiefly carry concert music, but in many localities farmers have installed them to receive market reports.

Correspondence from Texas reports 263 stations in Dallas, ranging in size from ¼ K. W. to 20 watts, and almost equal numbers in other cities of the state.

Cleveland, Ohio, reports probably 15,000 radio enthusiasts, 1,000 sending stations in greater Cleveland, virtually all amateur, and 10,000 receiving sets used almost nightly. These estimates exclude commercial sets. Cincinnati reports 500 sets.

Indiana has 4,500 amateur radio sets and Indianapolis 1,000 radiophones.

Wisconsin has nearly 1,500 stations, and the number is said by Malcomb P. Hanson, University of Wisconsin operator, to be increasing at the rate of five a day. Nearly 1,000 sets are reported in Milwaukee and vicinity.

North Dakota has a number of receiving stations and a few fairly powerful telegraph and telephone sending stations. The North Dakota Agricultural college is planning to install a 100-watt service for farmers. The vacuum tube is displacing older equipment in the state.

Marked growth is reported at Omaha, Neb., by two radio clubs, which have been in existence only six months. The University of Nebraska and Nebraska Wesleyan, co-operating, send to amateurs in Nebraska, South Dakota, Iowa, Colorado and Kansas.

H. G. Corcoran of Washington, D. C., Needs No Aerial for His Radio Outfit, His Receiving Wire Being Connected to the Wire Springs of His Bed.

Champion Wheat Grower Looks For A Good Crop; 160 Acres Sown

M. D. Graham, one of the bonanza farmers from above Burlington, was in Minot Monday. Mr. Graham has 1600 acres in crop this year and he has never had better prospects during the 20 years he has farmed in North Dakota. In 1915, Mr. Graham had a field of wheat that averaged 54 bushels per acre.

"I don't expect to raise such a wheat crop ever again, but the grain surely looks fine this year," he said. "The early wheat has started to head and I never saw grain make such a growth in my life. Two weeks ago, there were fields that looked brown and stood three or four inches high, that today are nice and green, and two feet or more high, and starting to head out. This is the best soil in the world when it gets the rain.

"I never saw better heads of rye. Some of the early rye was damaged by the heat, the heads turning white, but even much of this is filling well, tho not as well as the greener rye. The rye harvest will begin in two or three weeks. I hope it does not fill too rapidly, for this will mean a bigger crop if it is slow to fill.

"Much could yet happen to our wheat crop. While there is plenty of moisture, black rust could get in its work. I do not look for rust this year, as the wheat while a fine stand, is not as heavy as in 1916."

Mr. Graham states he has not raised an extra good wheat crop in six years. He has farmed heavy for two years and a big crop with good prices would come in handy this year. He has employed five and six men all summer on the farm. He is milking 24 cows.

Death Claims Early Glenburn Settler

Mrs. Myron W. Hunt of Glenburn passed away Tuesday, June 20, after a lingering illness from cancer. Funeral services were held from the Baptist church at Glenburn Thursday afternoon and the remains were interred in the Fairview cemetery.

Mrs. Hunt, whose maiden name was Helen Wilson, was born at Sandwich, Ill., July 12,1861, and was 61 years, 10 months and 20 days old at the time of her death.

She was married at Bancroft, Ia., to Mr. Hunt in 1883 and homesteaded in Ensign township, south of Glenburn, where she lived until her death.

She is survived by her husband and three children, two sons, Andy and Verne and a daughter, Mrs. Ben Guilfoyle. A brother, Eli Wilson, resides at States Center, Ia., and two sisters, Mrs. Walter Gris of Claresholm, Alta., and Mrs. H. W. Pettibone, of Fairview, Mont., survive.

Mrs. Hunt was a woman of high ideals. She was a pioneer in the Glenburn country and those who settled there at that time remember her for the many acts of kindness which she did for others during those trying pioneer days.

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The Road Victory at WICHITA
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500 miles at 94.48 miles an hour—a relentless grind over a rough-finished, sun-baked concrete and brick pavement at record-breaking speed—that is the gruelling test Oldfield Cord Tires underwent successfully at Indianapolis Speedway May 30th. They were on the winner's car for the third successive year and on eight of the ten finishing in the money, upholding the confidence successful race drivers have in the trustworthiness and ability of these tires to meet the greatest demands of speed, endurance and safety. Their records in every other important race have been equally as good.

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34,525 miles on rutted, icy Kansas roads, running day and night on a Studebaker stock car without a single tire change. This test was made by a group of Wichita automotive dealers in a tire, oil and gasoline economy run. Mayor Kemp of Wichita was official observer and made affidavit to the mileage and service given by Oldfield tires.

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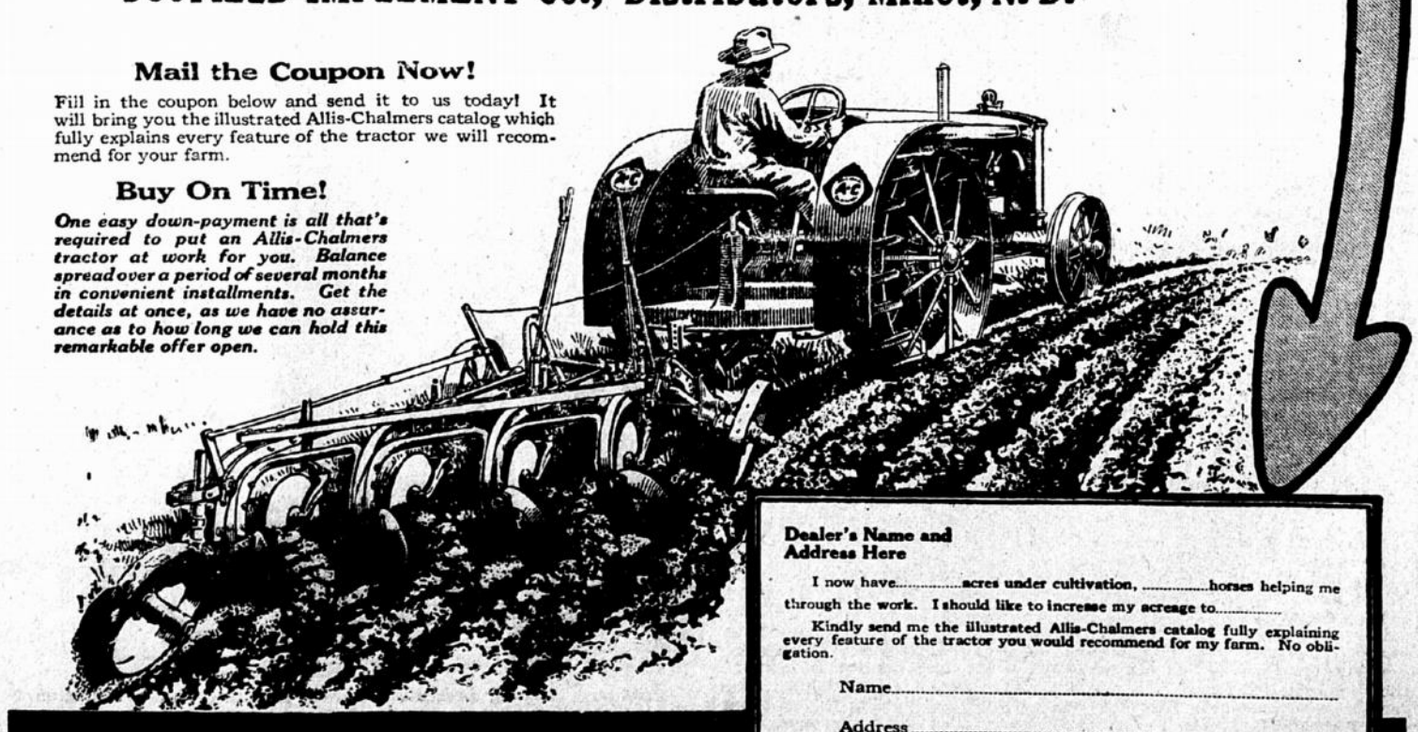

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